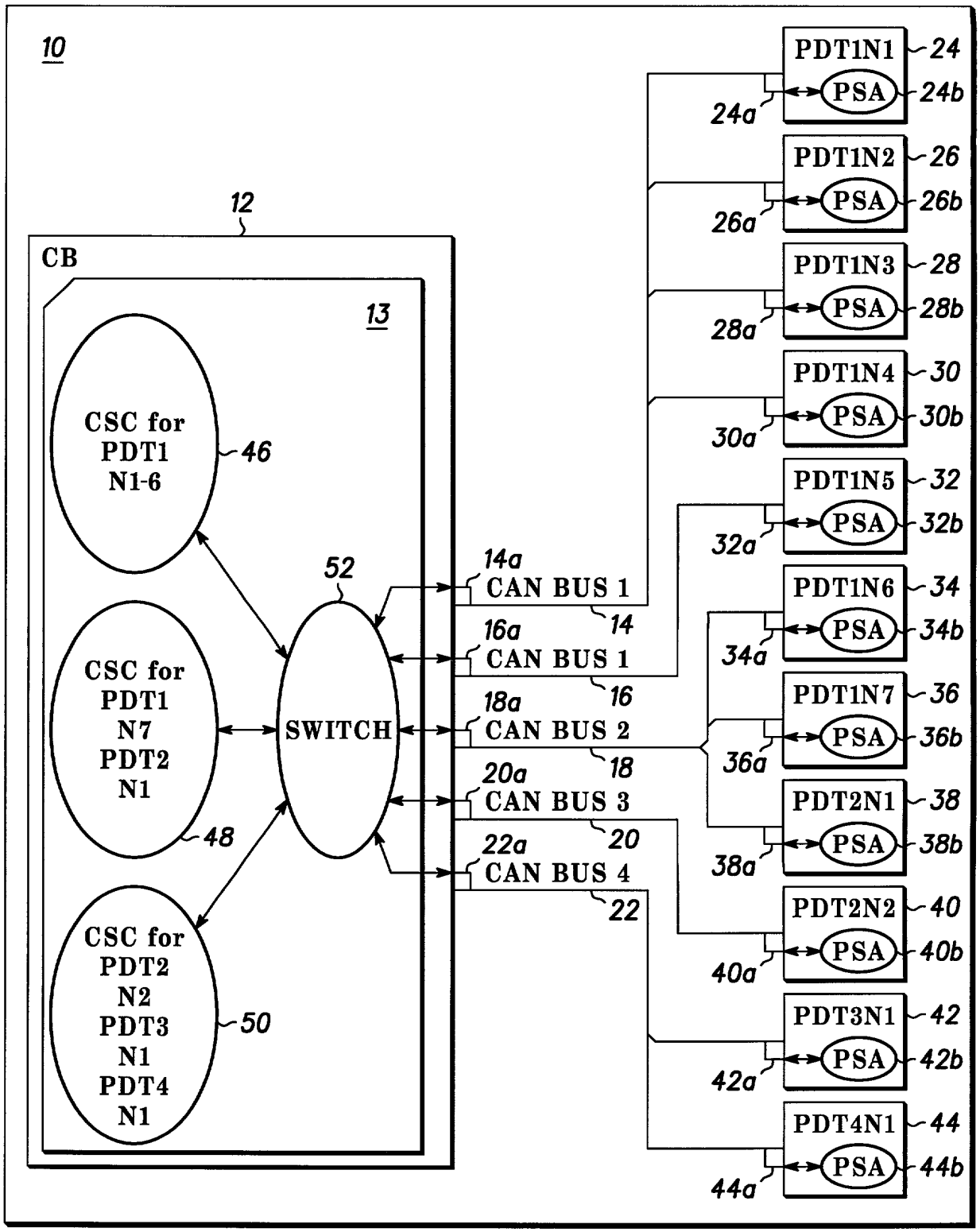
10
12
CB
13
CSC for PDT1 N1-6
46
CSC for PDT1 N7 PDT2 N1
48
CSC for PDT2 N2 PDT3 N1 PDT4 N1
50
52
SWITCH
14a
CAN BUS 1
14
16a
CAN BUS 1
16
18a
CAN BUS 2
18
20a
CAN BUS 3
20
22a
CAN BUS 4
22
PDT1N1
24
PSA
24b
24a
PDT1N2
26
PSA
26b
26a
PDT1N3
28
PSA
28b
28a
PDT1N4
30
PSA
30b
30a
PDT1N5
32
PSA
32b
32a
PDT1N6
34
PSA
34b
34a
PDT1N7
36
PSA
36b
36a
PDT2N1
38
PSA
38b
38a
PDT2N2
40
PSA
40b
40a
PDT3N1
42
PSA
42b
42a
PDT4N1
44
PSA
44b
44a

FIG. 1

| WORD NUMBER (16 BITS) | DESCRIPTION | VALUE |
|---|---|---|
| 1 | FUNCTIONAL AREA ID | UNIQUE IDENTIFIER OF COMPONENT |
| 2 | MESSAGE TYPE | REGISTRATION (0x7) |
| 3 | UPPER WORD OF TRANSACTION ID | 0 |
| 4 | LOWER WORD OF TRANSACTION ID | 0 |
| 5 | UPPER WORD OF MESSAGE LENGTH | 0 |
| 6 | LOWER WORD OF MESSAGE LENGTH | |
| 7 | CAN HEADER | DESCRIBED BELOW |
| 8-10 | DATA | DESCRIBED BELOW |

*SOFTWARE COMPONENT REGISTRATION MESSAGE (HEADER)*

FIG. 2A

| BYTE NUMBER (8 BITS) | DESCRIPTION | VALUE |
|---|---|---|
| 1 | DEVICE ID MESSAGE OPCODE | BITS 7,6=0<br>BITS 5-0=0x7 |
| 2 | DEVICE TYPE, DEVICE NUMBER | BITS 7-4=0xF (UNUSED)<br>BITS 3-0=0xF (UNUSED) |

*CAN HEADER FOR SOFTWARE COMPONENT REGISTRATION MESSAGE*

FIG. 2B

| BYTE NUMBER (8 BITS) | DESCRIPTION | VALUE |
|---|---|---|
| 1 | DEVICE TYPE REGISTERING FOR | DEVICE TYPE |
| 2 | DEVICE CAPACITY | NUMBER OF DEVICES IN DATA BYTE 2 WHICH COMPONENT CAN CONTROL |
| 3-6 | CHANNEL HANDLE (32 BITS) | CHANNEL HANDLE TO WHICH DEVICE MESSAGES ARE PUBLISHED TO |

*DATA FOR SOFTWARE COMPONENT REGISTRATION MESSAGE*

FIG. 2C

Appl. No. 09/754,605

| VALUE | MESSAGE TYPE |
|---|---|
| 0x1 | ALARM |
| 0x2 | COMMAND |
| 0x3 | ACKNOWLEDGE |
| 0x4 | STATISTIC |
| 0x5 | DOWNLOAD |
| 0x6 | MMI |
| 0x7 | REGISTRATION |

FIG. 3

| FRAME ID<br>BITS 15, 14 | MESSAGE OPCODE<br>BITS 13-8 | DEVICE TYPE<br>BITS 7-4 | DEVICE NUMBER<br>BITS 3-0 |
|---|---|---|---|

FIG. 4A

| BYTE NUMBER (8-BITS) | DESCRIPTION | VALUE |
|---|---|---|
| 1 | FRAME ID, MESSAGE OPCODE | BITS 7,6=FRAME ID<br>BITS 5-0=MSG. OPCODE |
| 2 | DEVICE TYPE, DEVICE NUMBER | BITS 7-4=DEVICE TYPE<br>BITS 3-0=DEVICE NUMBER |

CAN HEADER

FIG. 4B

| MESSAGE TYPE<br>BITS 10-7 | DEVICE TYPE<br>BITS 6-3 | RESERVED<br>BITS 2-0 |
|---|---|---|

FIG. 5

| FRAME ID | DESCRIPTION |
|---|---|
| 0x2 | START FRAME |
| 0x0 | MID FRAME |
| 0x3 | END FRAME |

FIG. 6

20141202 "0954900"

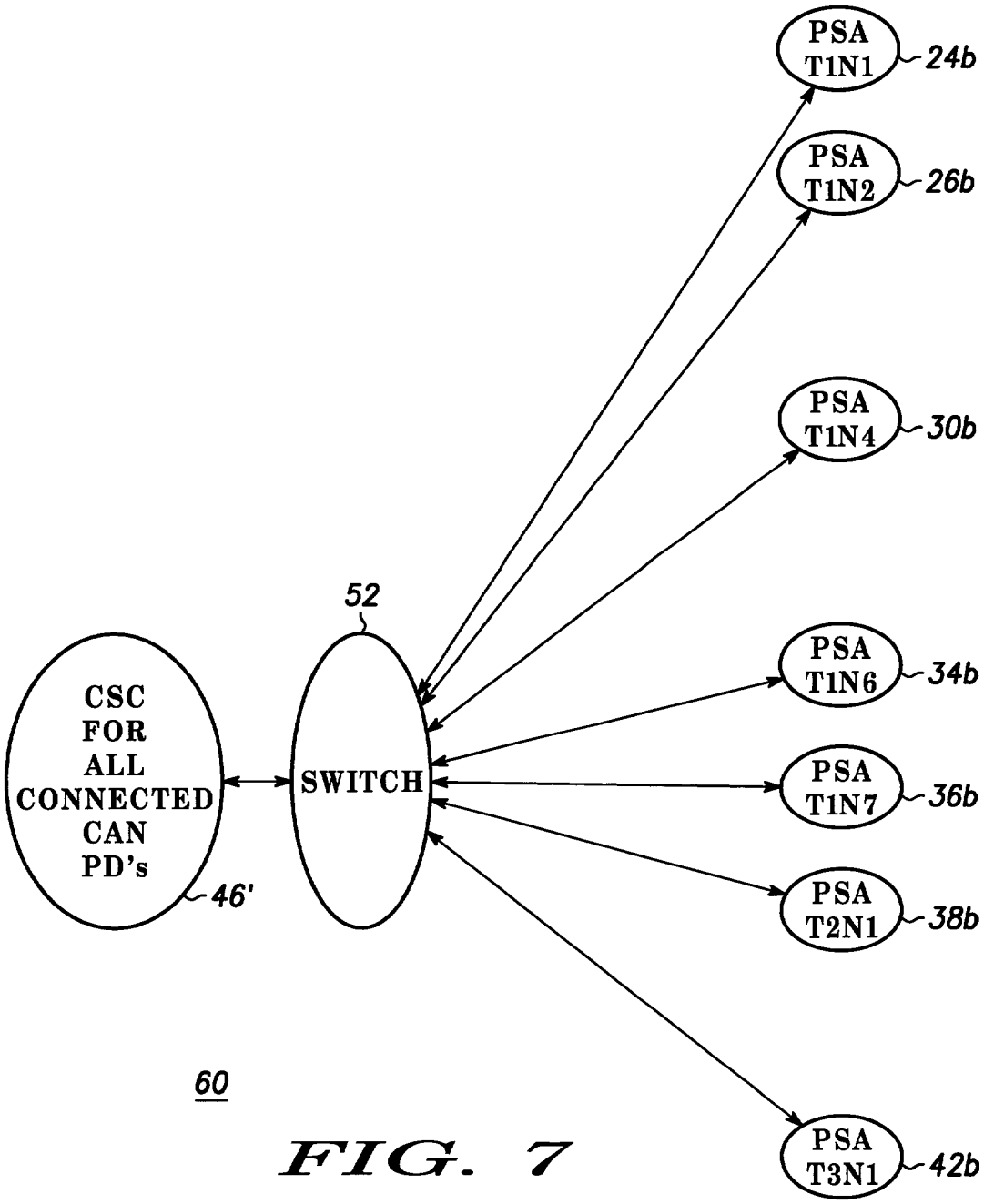


FIG. 7

2001-1702 05/04/05 10:47:06

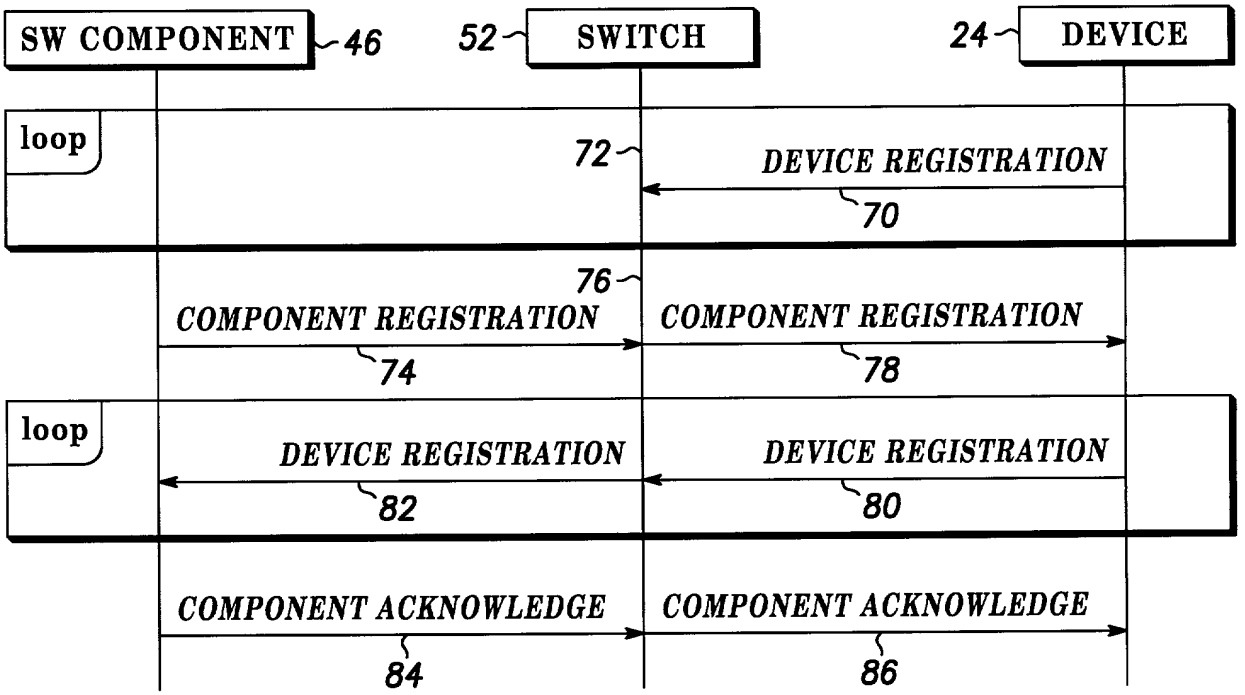
SW COMPONENT
46
52
SWITCH
24
DEVICE
loop
72
DEVICE REGISTRATION
70
76
COMPONENT REGISTRATION
74
COMPONENT REGISTRATION
78
loop
DEVICE REGISTRATION
82
DEVICE REGISTRATION
80
COMPONENT ACKNOWLEDGE
84
COMPONENT ACKNOWLEDGE
86

FIG. 8

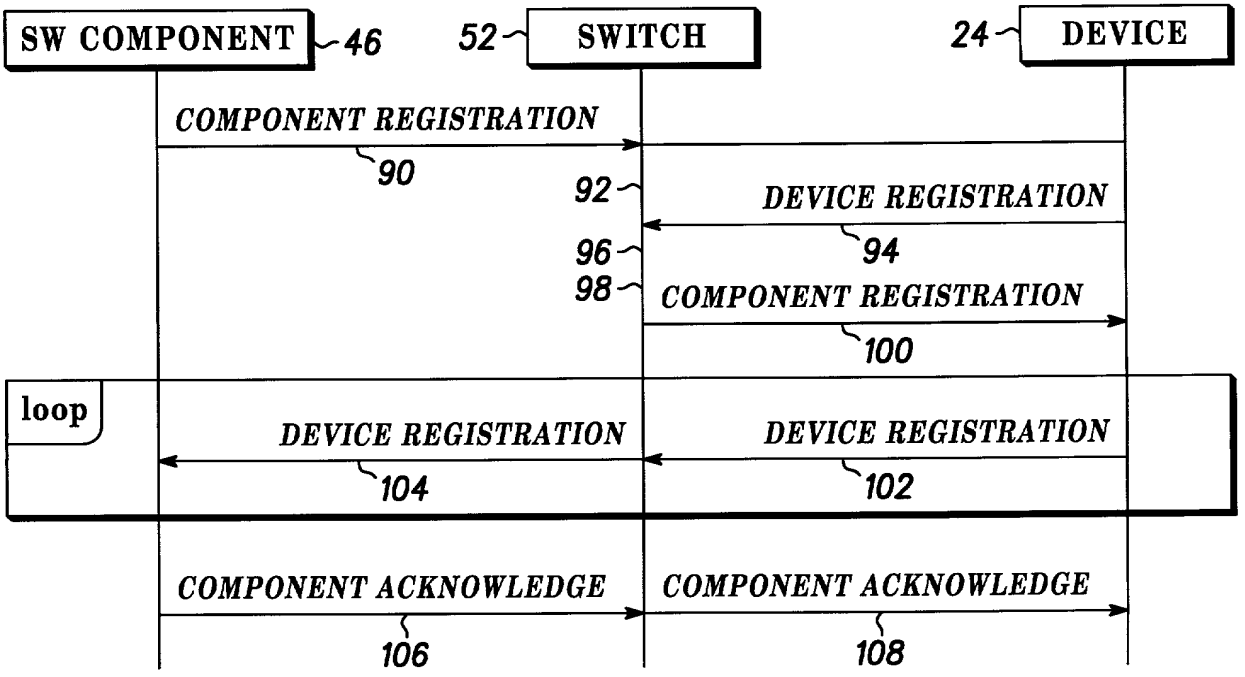
SW COMPONENT
46
52
SWITCH
24
DEVICE
COMPONENT REGISTRATION
90
92
DEVICE REGISTRATION
94
96
98
COMPONENT REGISTRATION
100
loop
DEVICE REGISTRATION
104
DEVICE REGISTRATION
102
COMPONENT ACKNOWLEDGE
106
COMPONENT ACKNOWLEDGE
108

FIG. 9

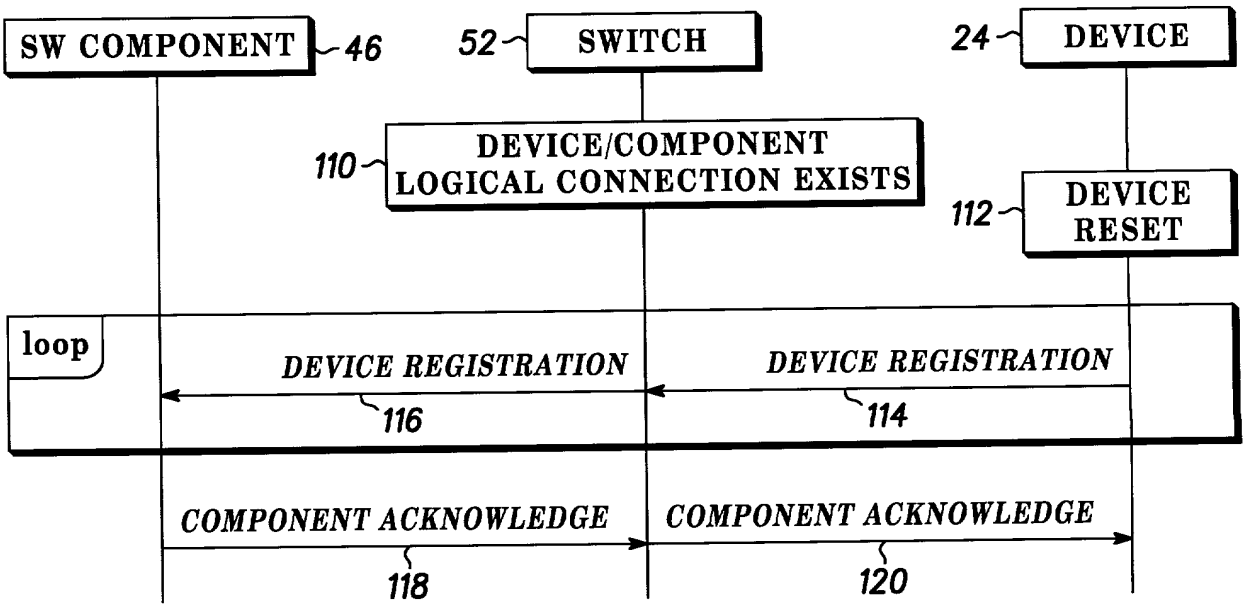
SW COMPONENT
46
52
SWITCH
24
DEVICE
110
DEVICE/COMPONENT
LOGICAL CONNECTION EXISTS
112
DEVICE
RESET
loop
DEVICE REGISTRATION
116
DEVICE REGISTRATION
114
COMPONENT ACKNOWLEDGE
118
COMPONENT ACKNOWLEDGE
120

FIG. 10

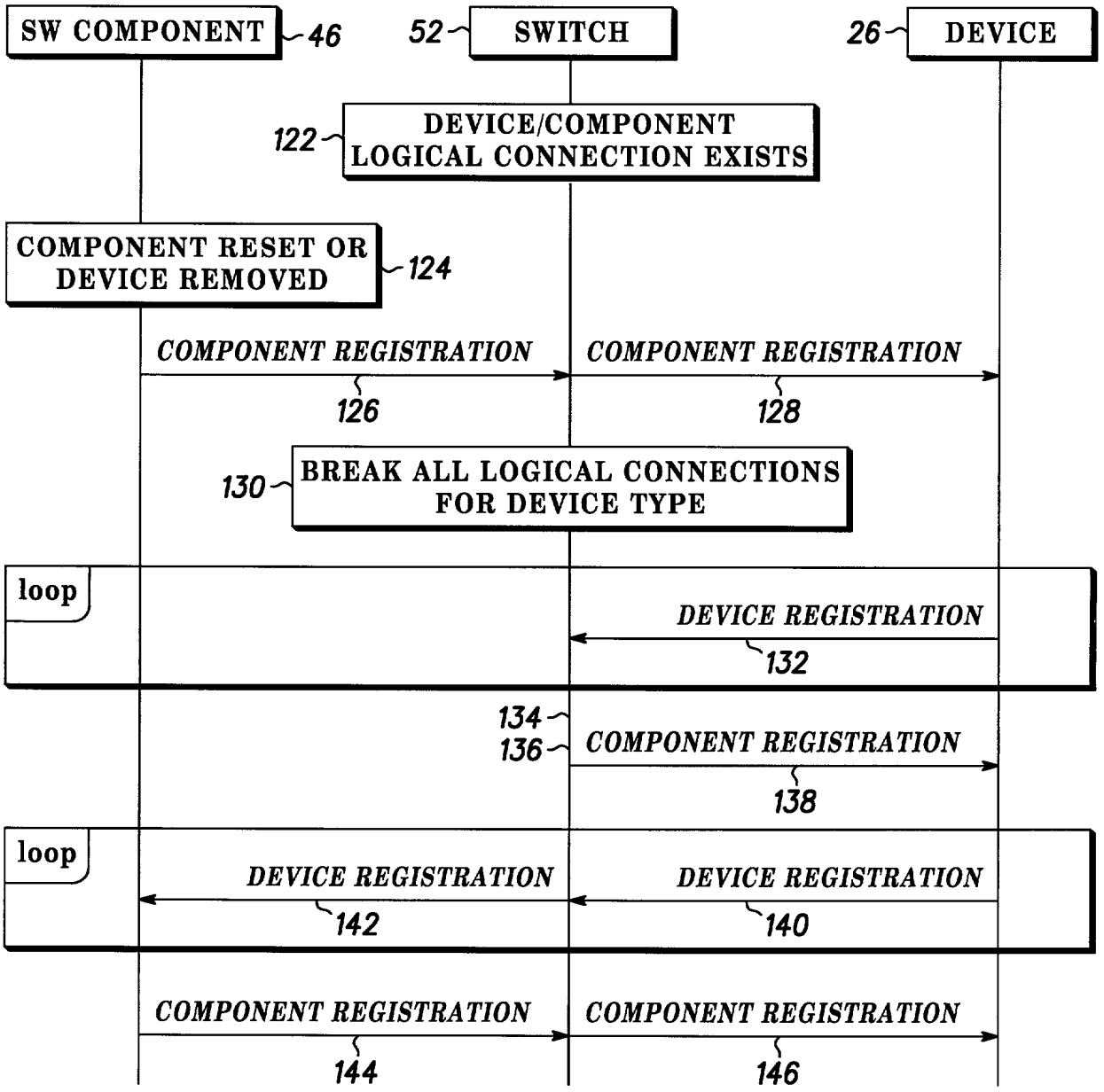


FIG. 11

Docket # 50T4455 - Date: 10-14-05